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10/697,961	10/31/2003	Wassim Haddad	1509-475	7622
22879	7590	10/18/2007	EXAMINER	
HEWLETT PACKARD COMPANY			DUNN, DARRIN D	
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INTELLECTUAL PROPERTY ADMINISTRATION				
FORT COLLINS, CO 80527-2400			2121	
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			10/18/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	10/697,961	HADDAD, WASSIM
	<b>Examiner</b>	<b>Art Unit</b>
	Darrin Dunn	2121

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 31 July 2007.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-28 is/are pending in the application.
  - 4a) Of the above claim(s) 27-28 is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-26 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 01 August 2007 is/are: a) accepted or b) objected to by the Examiner.
 

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

1. This Office Action is responsive to the communication filed on 07/31/2007.
2. Claims 1-26 have been presented for examination. Claims 27-28 have been cancelled.

#### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

- (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

4. Claims 1-7, 9-13, and 15-28 are rejected under 35 U.S.C. 102(a) as being anticipated by O'Neill et al. (USPN 2002/0191593).

5. As per claim 1, O'Neill et al. teaches a method of establishing a network connection from a mobile computing device to a data source on a foreign network, the method comprising:

configuring a first network connection – 146 [FIG 1] between a mobile computing device -160 and a foreign network – 114 via a home network – 128 [FIG 1 – 112,114] A foreign network, not defined in specification, is interpreted as a visited network. A data source, not defined in specification, is interpreted as a source of information. In the instant case, a data source corresponds to information provided by either 112 or 116);

determining that a data source for data requested by the mobile computing device originates from within the foreign network ([FIG 1 – 116])

breaking at least a portion of the first network connection – [FIG 1], [0007 lines 8-10]

e.g., a connection is interpreted as a communication comprising one or both SIP and/Mobile IP.

In the event SIP is not utilized, i.e., voice data is not used, a portion of the communication is in effect not used or the equivalent of the terminology breaking); and

establishing a second network connection - 150 between the mobile computing device and the data source – SIP Server Node within the foreign network – visited source ([FIG 1 – 112])

6. As per claim 2, O'Neill et al. teaches a method according to claim 1, which uses the Session Initiation Protocol (SIP) to initiate the breaking of the network connection to the existing network connection ([FIG. 1], [0005], [0011]).

7. As per claim 3, O'Neill et al. teaches a method according to claim 1 in which at least one of the home network and the existing network comprises a plurality of sub connections and the method is applied to at least one of the sub connections ([FIG 1], [0006]).

8. As per claim 4, O'Neill et al. teaches a method according to claim 1 in which the portion of the first network connection with the home network that is broken is re-established once data is no longer being requested from the data source by the mobile computing device ([FIG 1], [Page 8, paragraph 2] e.g., this claim is interpreted to mean that real time data, such as voice, is not used by a mobile node. In this case, SIP is not employed to support real time data communication. Rather, Mobile IP teaches that a CoA is employed to maintain a network connection for non-real time data, see Mobile IP. However, in the case of voice, SIP provides for the use of URLs mapped to an IP address of the user device to enable real time data transmission, see IP Multimedia Services – Session Initiation Protocol in prior art citation).

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9. As per claim 5, O'Neill et al. teaches a method according to claim 1 in which the Mobile IP is used to maintain a network connection with the foreign network ([FIG 1-116], [0008]).

10. As per claim 6, O'Neill et al. teaches a method according to claim 1 in which the mobile computing device is assigned an IP address within the foreign network for the transmission of data that originates from the network ([0004] e.g., IP host/mobile device inherently uses an IP address for communication. Mobile IP further provides that the device is assigned a permanent IP address by the home network, see Mobile IP in prior art citation).

11. As per claim 7, O'Neill et al. teaches a method according to claim 6 in which Mobile IP is used to maintain a network connection with the foreign network and the IP address assigned to the mobile computing device is used instead of a care of address assigned by the Mobile IP for data that originates within the network ([FIG 1], [0006] e.g., Mobile IP provides for a network connection and SIP enables voice, i.e., data originating in the network, that utilizes an IP address of the device. SIP provides for the association of the a URL with an IP address as to provide integrated mobility supporting both real time and non-real time communication).

12. As per claim 9, O'Neill et al. teaches a computing device –SIP server [0021] within a foreign network configured to determine that a network address of a data source [0021 lines 1-5] , from which a mobile computing device operating in the foreign network, is requesting data, is in the same foreign network, the computing device further configured to establish a network connection between the mobile computing device and the data source without using a care of address assigned by the foreign network (SIP provides for the association of a URL with an IP address in the event of real time/ voice transmission)

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13. As per claim 10, O'Neill et al. teaches the computing device according to claim 9 further configured to assign an IP address to the mobile computing device to use whilst performing one of requesting and receiving data originating from within the foreign ([0004], [0005], [0006]) Mobile IP provides for the assignment of a care of address to a mobile device. SIP provides for the association of a URL with an IP address in the event of real time/voice transmission).

14. As per claim 11, O'Neill et al. teaches the computing device, according to claim 10, further configured to stop using the assigned IP address once data no longer originates from within the foreign ([FIG. 1], [0005], [0006] e.g., the claim is interpreted to mean that if voice data is no longer transmitted, i.e., no longer originating within the network, then the IP address is no longer employed via SIP. The reference specifically provides for voice support via Mobile IP and SIP. It is understood that Mobile IP is employed to maintain the network connection. Mobile IP teaches that a CoA is employed to maintain a network connection, i.e., the IP address is no longer employed).

15. As per claim 12, O'Neill et al. teaches a processing device – 128) configured to control the establishment and dropping of network connections network within a first network – Home network of node X] [FIG 1]-128), the processing device configured to allow computing device to make a new connection within the first network ([FIG. 1- 146)), while maintaining a network maintaining to another network – 112 ([FIG. 1 –112, 136]), the processing device being arranged to provide a computing device with a care of address ([FIG 1], [0004] e.g., Mobile IP provides a care of address to end node), the computing device comprising a data transfer controller – Mobile Ipv4, configured to determine that data transmitted to the computing device originates from within the first network([0043]), and that data should be transmitted to the computing

device without using the care of address ([FIG. 1], [0006] e.g., it is interpreted that Mobile IP provides utilizes the end node address when local to the network opposed to using a CoA for remote connections).

16. As per claim 13, O'Neill et al. teaches a processing device -128 according to claim 12 configured to assign a network address, comprising IP address once it has been determined that the care of address should not be used ([FIG 1 - 132],[0005] – home session signaling server module).

17. As per claim 15, O'Neill et al. teaches a foreign network – 114 ([FIG 1]) configured to establish a first network connection – 146 ( it is interpreted that establishing a network connection includes a connection involving the use of a home network) between a computing device – 160 in a foreign network and a data source in the foreign network –116 , using a care of address network ([FIG. 1] e.g., Mobile IP provides for CoA)

determine at least one of bandwidth requirements [0031 – remaining bandwidth], number of network devices required, and security implications, of a second network connection - 150 ([FIG1]) from the computing device - 160 to the data source – SIP Server Node that does not use the care of address.

establish a second network connection - 150 for the computing device in the foreign network without using the care of address (it is interpreted in the case of voice, SIP provides for the use of URLs mapped to an IP address of the user device to enable real time data transmission, see IP Multimedia Services – Session Initiation Protocol in prior art citation)

break the first network connection that uses the care of address handoff [0024]

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18. As per claim 16, O'Neill et al. teaches a memory storing instructions which when read on to at least one processing device cause that processing device to perform the method of claim 1 ([0029] e.g., modules).

19. As per claim 17, O'Neill et al. teaches a memory storing instructions which when read on to at least one processing device cause that processing device to perform the method of claim 9 ([FIG 1., [0020], [0043] e.g., end nodes, such as mobile devices, inherently contains instructions for maintaining a connection. End nodes can establish and conduct communication sessions with an access node).

20. As per claim 18, O'Neill et al. teaches a memory storing instructions which when read on to a processing device cause that processing device to function as the processing device of claim 12 ([FIG 1], [0029-32] e.g. modules).

21. As per claim 19, O'Neill et al. teaches a memory storing instructions which when read on to a processing device running a network cause the network to function as the network of claim 15 ([FIG 1], [0029-32] e.g. modules).

22. As per claim 20, O'Neill et al. teaches a method establishing network connectivity between a mobile computing device operating within a foreign network and a data source within the foreign network, the method comprising:

providing the mobile computing device with a care of address and establishing a first network connection - 146 to the data source -130 using the care of address ([0004] e.g., Mobile IP provides for a care-of-address for a mobile node as it enters a foreign network);

determining that the data requested by the mobile computing device originates within the foreign network ([0043] e.g. an access node provides an identifier to end node. In addition, Mobile IP also provides this capability via broadcasting, see Mobile IP in prior art citation); breaking at least a portion of the first network connection that uses the care of address ([0009] e.g., it is interpreted that a connection comprises a combination of either SIP and/or Mobile IP. It is interpreted that one portion corresponds to SIP wherein the entire connection consists of both SIP/Mobile. When SIP is not implemented, a portion is therefore understood as not being used or broken)and

assigning a network address, other than the care of address, to the mobile computing device such that the data, originating from the foreign network, is sent to the mobile computing device using the network address rather than the care of address for that portion of the first network connection that was broken. if the data requested by the computing device does originate within the network, breaking at least a portion of the network connection with the existing network ([0004] e.g., Mobile IP handover) and assigning a network address for the network to the computing device such that data is sent to the computing device from the network rather than using the care of address for that portion of the network address that has had its connection to the existing network broken ([FIG 1], [0005], [0006], [FIG] e.g., SIP handles session termination and initiation).

23. As per claim 21, O'Neill et al. teaches a device – end node [FIG 1]) configured to establish a network connection and communicate with a home network, the device capable of determining the origin of data transmission and further configured to receive a care of address by a foreign network [0004], the care of address being used to enable data transmission between the

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device and the home network [0004], the device being arranged to communicate with the foreign network without using the care of address if it is determined that data being sent to the device originates within the foreign network ([FIG 1 –112 e.g. SIP communication])

24. As per claim 22, O'Neill et al. teaches a server operating on a first network, the server configured to:

provide a care of address ([0004], [FIG 1-130]) to at least one computing arrangement [FIG 1-160] on the first network -128;  
connect the computer arrangement to another network – 114 using the care of address – 116 ([FIG 1])

determine that the data being transmitted to the computer arrangement originates from a data source –SIP server within the first network (FIG 1] e.g. Mobile IP broadcasting); and  
connect the computing arrangement to the data source without using the care of address ([0005] SIP session) ([FIG 1])

1. As per claim 23, O'Neill et al. teaches a second computer network –visited network ([FIG 1]) comprising a computing arrangement –end Nodes configured to establish a second network connection –SIP session whilst maintaining a first network connection to a first existing network ([FIG 1] e.g., Mobile IP connection), the first network connection using a care of address assigned to the computer arrangement [0004], the second network comprising a data transfer controller - to determine that data transmitted to the computing arrangement originates from within the second network, the data transfer controller further configured to determine whether the data should be transmitted without the care of address (FIG1 SIP server)

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25. As per claim 24, O'Neill et al. teaches a method of establishing a network connection allowing a computing device operating on a foreign to receive data from a data source within the foreign network, without the use of the care address associated with the computing device, the method comprising:

establishing a first network connection between the computing device and a home network using a care of address assigned to the computing device ([FIG. 1] e.g., Mobile IP provides for CoA, [0004])

determining that data requested by the computing device originates from a data source within the foreign network; ([FIG 1])

disconnecting at least a portion of the first network connection –SIP session; and establishing a second network connection between the data source within the foreign network and the computing device operating in the foreign network for that portion of the first network connection that was disconnected by assigning an IP address to the computing device for transmission of data that originates from the foreign network ([FIG 1 – 162, 114,112])

26. As per claim 25, O'Neill et al. teaches a method according to claim 24 in which at least one of the foreign network and home network comprises a plurality of channels and the method is applied to at least one of the channels ([FIG 1]).

27. As per claim 26, O'Neill et al. teaches the method according to claim 24 which uses the Session Initiation Protocol (SIP) to initiate the breaking of the network connection to the home network ([0005]).

***Claim Rejections - 35 USC § 103***

28. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

29. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

30. Claims 8 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over O'Neill et al. (USPN 2002/0191593) in view over Shoaib et al. (USPN 2003/0193910).

31. As per claims 8 and 14, O'Neill et al. teaches a method according to claims 1 and 12, wherein prior to establishing the new network connection, respectively, in which the computing device is capable of assessing security implications in assigning a new IP address to the mobile computing device ; determining bandwidth availability on the foreign network; and determining a number of routers/switches required for the new connection

However, O'Neill et al. does not teach an assessment of the bandwidth on the foreign network. Shoaib et al. teaches an assessment of bandwidth during handover ([0008] e.g., bandwidth/ bytes per second (speed of connection)).

At the time the invention was made, one of ordinary skill in the art would have motivation to modify O'Neill et al. to further include an assessment of available bandwidth prior to a handover as taught by Shoaib et al. Both O'Neill et al. and Shoaib et al. pertain to wireless networks. Moreover, O'Neill et al. specifically contemplates the implications that occur prior to handover- assessing security implications. In addition, O'Neill et al. seeks to increase bandwidth utilization on network links [0012] and track resource information, such as information on available remaining bandwidth [0031]. Since devices, such as mobile phones utilizing voice, may require higher bandwidth to operate efficiently, and since O'Neill et al. specifically provides for voice communication support [0006], one of ordinary skill in the art would have an expectation of successfully integrating a bandwidth assessment as taught by Shoaib et al. to realize optimized results prior to a handover, especially when voice communication is employed by a mobile device.

***Response to Amendment***

32. Amendments to the drawings, claims, and specification have been fully considered. The formal objections to the specification, claims, and drawings, in light of applicant's amendment, have been withdrawn.

***Response to Arguments***

33. Applicant's arguments filed 07/31/2007 have been fully considered but they are not persuasive.

A network is interpreted as a connection among two or more computing arrangements, provided a means to communicate between the arrangements is provided. In the instant case, figure 1 provides for a computing network in which a plurality of end nodes access both a home and/or a visited cell. A foreign network is interpreted as corresponding to any connection covering a visited cell or node exclusive of the home network. Likewise, a first network is interpreted as corresponding to connections with the home network. A second network is interpreted as connections involving a visited nodes, which according to figure 1, are operable to be in communication with the home network of end node x.

In the instant application, a foreign network is interpreted as corresponding to visited nodes, including both an SIP server and a Mobile Foreign Agent Module. Since a data source is interpreted as providing for the communication of data, both an SIP server and/or a Mobile Agent in the visited, i.e., foreign network, appear to satisfy a data source. A connection is interpreted as comprising both an SIP and/or Mobile IP type connection. In the context of maintaining mobility, Mobile IP is implemented to maintain a portion of the communication. In the context of voice data, SIP is utilized as another part of the communication. It is therefore interpreted that when SIP is not implemented, a portion of the communication is not being utilized. The subsequent use and non-use of voice data is interpreted as implying the SIP portion is set up and broken down depending on respective voice data implementations. As a result, examiner respectfully implies a portion of the connection is broken in response to voice data via SIP sessions.

*Conclusion*

34. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

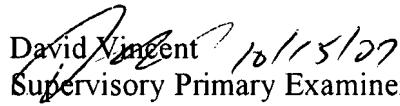
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Darrin Dunn whose telephone number is (571) 270-1645. The examiner can normally be reached on EST:M-R(8:00-5:00) 9/5/4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Vincent can be reached on (571) 272-3080. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DD  
10/12/2007

  
10/15/07  
Supervisory Primary Examiner  
Art Unit 2121